

Multicellular Life



Unicellular vs. Multicellular

Unicellular Organisms	Multicellular Organisms
Organisms made up of only one cell	Organisms made up of many cells.
Dominant life form on earth	Cells are specialized to perform specific tasks or functions
Very small	Can be very large

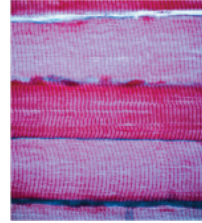
Cell Specialization

cells of an organism develop in different ways to perform different tasks

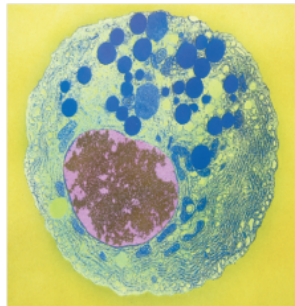
**Red blood cells
transport oxygen**



**Muscle cells
allow movement**



**Cells in the pancreas
produce insulin**



Cell Differentiation

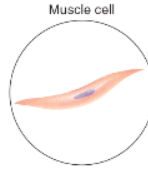
How do cells become specialized?

Stem Cells – small unspecialized cells that have the potential to differentiate

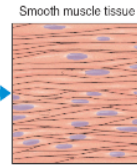
Differentiation - is the stem cells ability to become specialized in structure and function

Levels of Organization in Multicellular Life

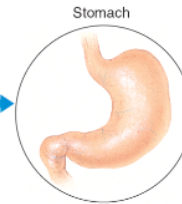
Cell- basic unit of living things



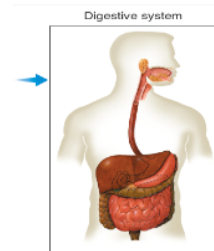
Tissue - a group of similar cells that perform a particular function



Organs - groups of tissues that work together to perform a specific function.



Organ system - group of organs that work together to perform a specific function



Multicellular organisms are found in

- Kingdom Fungi (most)
- Kingdom Plantae
- Kingdom Animalia